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REMARKS

In response to the Office Action mailed on July 15, 2005, Applicants respectfully request reconsideration in view of these remarks and amendments.

Claim 1-18 are currently pending in this Application.

Claims 15-18 have been withdrawn.

Claims 1 and 11 are independent claims.

In this Amendment, claims 19 and 20 have been added. Applicants believe that the claims as presented are in condition for allowance. A notice to this affect is respectfully requested.

Claims 11-14 have been rejected due to informalities. Claim 11 has been herein amended accordingly to recite an "event message of the information stored...."

Claims 11-14 have been rejected under 35 U.S.C. §112 for indefiniteness. Accordingly, claim 11 has been herein amended to recite "modifying operation of the computer according to the set of rules," to further clarify and distinguish Applicant's claimed invention.

Claims 1-14 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,633,923 (Kukura, et al.). For the reasons discussed further below, Applicants respectfully disagree(s) with these contentions and assert that the present claimed invention is not anticipated by any disclosure in the Kukura '923 reference. Kukura discloses a CORBA (Common Object Request Broker Architecture) environment adapted for chaining interceptors to facilitate the binding of methods (functions) invoked in a server (CORBA Servant) by a client, as discussed at col. 6, lines 35-55. Binding, as is known in the art, is employed in Kukura to allow a client (e.g. application) to invoke services in the server by identifying the object providing the service (col. 5:33-47).

In brief, the Invention defined by the present claims is distinguishable from the disclosure in Kukura because the interceptors disclosed in Kukura define a mechanism of binding software object invocations in a CORBA

environment (col.5, line 48-col. 6, line 25), while the present claim 1 recites a “plurality of rules defining allowable activity based on a pattern of activity,” and employing “plural interceptors identifying and governing the activity based on an application of the rules to the activity.” Therefore, in the invention defined by the present claims, the interceptors are for governing activity based on rules applied to an event-driven state computed from information in the events (page 10, lines 5-11 of the specification as filed). Specifically, the state machine employs the interceptors for identifying a set or sequence of events which, when occurring in a particular order or timeframe, define a state indicative of prohibited activity (page 8, lines 16-30 of the specification as filed).

In further detail, the Office Action rejects the present claim 1 because claim 1 recites “plural interceptors identifying and governing” activity based on a plurality of rules. The Office Action suggests that Kukura ‘923 teaches such interceptors at col. 23:19-39. It appears that the Office Action equates the cited interceptors as performing the claimed “identifying and governing the activity based on an application of the rules to the activity.” The cited sections of Kukura, however, discuss conditional interceptor operation based on a status attribute (23:20-21 and 23:24). Therefore, the Kukura ‘923 interceptors are merely examining a status attribute, not receiving an event and computing a state. Claim 2 clarifies this distinction by reciting “a process which correlates the state information across different ones of the plural interceptors,” also discussed further below with respect to new claims 19 and 20.

In contrast, in the present invention, as claimed in claim 1, the interceptors 101 receive events 103 from application code indicative of occurrences during processing. The stateful reference monitor 104 computes a state based on the event messages, and consults a rule interpreter 206 to determine whether to allow or prohibit the activity that is the source of the event (page 10, lines 12-19). Accordingly, Kukura does not show, teach, or disclose the claimed interceptors and governing based on the pattern of activity because the Kukura interceptors do not receive events and do not employ a rule based state check as in the

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claimed invention. In Kukura, the interceptors define a control path to a service irrespective of any state or events, as disclosed at col. 6:46-55 and col. 42:24-39.

The interceptors in Kukura '923, therefore, are for receiving object invocations and passing control, while the claimed interceptors in the present application receive events (data) for selectively computing a decision to allow or block activity. Therefore, the interceptors in Kukura implement a non-selective invocation (call) sequence between objects, and manipulate control information, while the interceptors in the present application receive and channel event data for selective allowance based on rule enforcement. The present claim 1 is distinguishable because control and data manipulation are different and because the Kukura '923 call sequence is a non selective chain of control references, while the claimed rule enforcement is conditional (selective) based on the rules. Accordingly, claim 1 is deemed allowable in view of the foregoing remarks and reconsideration is respectfully requested.

Claim 11, rejected under similar rationale, recites a rule interpreting process which performs similarly to the plural interceptors. Accordingly, claim 11 is also believed allowable according to the above remarks.

The Office Action further rejects claim 4 based on the assertion that Kukura discloses (23:19-39) correlation of state information using the interceptors and a rule interpreter. As indicated above, however, the Kukura '923 interceptors are responsive not to rules, but to a binding sequence for unwinding a call stack for an object invocation. The Kukura Binding "results in a chain of initialized interceptor instances at the client and a similar chain at the server through which responsibility for processing the request flows" (6:42-45). Therefore, the chained interceptors define a sequence of invocations, or calls, allowing the client and server to interact. In contrast, the claimed rule interpreter applies the rules to the state defined according to the events received by the interceptors, as discussed at page 10, line 31-page 11, line 11.

Further, the cited sections of Kukura do not show, teach or disclose a rule, as claimed in claim 4, but rather a status attribute check (23:20, 24) for failure

termination. Therefore, it is respectfully submitted that claim 4 is allowable. Further, claim 19, clarifying the subject matter of claim 4 by reciting "interceptors operable to receive a sequence of events indicative of requests for operating system resources," as disclosed at page 9, lines 1-4, has been herein added, to further clarify and distinguish the present invention and is also deemed allowable for the foregoing reasons.

The Office Action further rejects claim 7, based on the assertion that Kukura discloses plural resource interceptors corresponding to resource types (23:19-39). As indicated above, however, the claimed interceptors receive events for computing a state. In contrast, the cited Kukura interceptors receive ORB invocations for accessing a predetermined service (col. 42:50-65). The interceptors in Kukura '923, therefore, are for receiving object invocations and passing control, while the claimed interceptors in the present case receive events (data) for selectively computing a decision to allow or block activity.

Such an invocation occurs from a CORBA client to a CORBA servant based on the referenced service, irrespective of the resource type and/or a single repository. Such service invocations are fixed requests based on compiled references from source code, and are not based on conditional state computations or rule interpretations. Accordingly, the cited interceptors in Kukura serve to define a call, or invocation sequence to a requested service, not a selective rule based response based on state machine computations, as do the interceptors recited in claim 7.

Further, the events contributing to the computed state correspond to the application generating the event, rather than a user-centric event which focuses on the rights and privileges of a particular user. Therefore, the claimed state computation is operable to allow policies to be set and statefully executed orthogonal to the user community, as disclosed at page 10, line 31-page 11, line 4. This approach differs from Kukura because the Kukura '923 interceptors receive invocation requests for services, not application generated events indicative of OS requests, as in the claimed reference monitor. No such user-

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independent events or state computation thereof is shown or disclosed, alone or in combination by Kukura '923.

Accordingly, claim 20 has been herein added, encompassing the subject matter of claims 1, 4 and 7, reciting such responsiveness to a stateful reference monitor for computing a processing policy decision based on a state determined from the events from the plural reference interceptors, to further clarify and distinguish the invention as defined by the present claims. Accordingly, claims 7 and 20 are therefore respectfully submitted as allowable.

As the remaining claims depend, either directly or indirectly from claims 1 or 11, which by the foregoing are deemed allowable, it is respectfully submitted that all claims now in the case are in condition for allowance.

Applicants hereby petition for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 366-9600, in Westborough, Massachusetts.

Respectfully submitted,



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